MEMORANDUM. UTAH DEPARTMENT OF TRANSPORTATION

DATE: July 8, 2003

TO: Those on the attached list

FROM: Howard J. Anderson, P.E.

Engineer For Pavements

SUBJECT: Utah Pavement Council

Date: July 16, 2003

Location: UDOT Complex, Large Conference Room, First Floor

Address: 4501 South 2700 West

Salt Lake City, UT 84119

Time: 1:00 PM to 4:00 PM

The next Utah Pavement Council meeting is scheduled as shown above.

Attendance June 18th Meeting:

Mohammad Rahman, Cameron Petersen, Murari Pradhan, Tim Biel, Rodney Terry, Stephane Charmot, Troy Peterson, Joe Johnson, Larry Gay, Rob Duncan, Craig Haskell, Gordon Lee, James Hulse, Todd Laker, Scott Andrus, Bill Lawrence and Howard Anderson.

The following ground rules are recommended for our group: 1. Participate by providing your agenda items and reviewing the specifications or procedures and making comments. 2. Bring your reviewed copy of the draft. 3. Come on time and stay and participate as best you can. 4. Stay on task during discussions. 5. Keep personal gripes to a minimum. 6. Keep side conversations during breaks only.

Notes from June 18th, 2003 Meeting:

- 1. **Welcome** Howard Anderson, the notes were approved from last time with no changes.
- 2. **Revision of an Updated Bonded Wearing Course Specification** Stephane Charmot from Koch introduced this revised specification to the Pavement Council. This specification covers the requirements for the placement of a Bonded Wearing Course (BWC). BWC is a paver placed surface treatment consisting of an application of a warm polymer modified asphalt emulsion membrane followed immediately with an ultrathin overlay (typically less than 1") of hot asphalt concrete so as to produce a homogeneous wearing surface that can be opened to traffic immediately upon sufficient cooling. BWC

can be placed either on flexible or rigid pavements. The finished wearing course shall have a minimum thickness of 1/2" for Type A and 5/8" for Type B and Type C. We reviewed the changes, most of which were on page 8 through 11 of the document. Tim mentioned that they may want to consider use of the Hamburg instead of the Lottman test. The discussion was on how the layers would perform in comparison with an Open Graded Friction Course, although this is hard to do because of their basic differences. With OGFC we normally place no more than two lifts over each other because moisture can be trapped in the high air void material causing stripping of the HMA. The BWC also has high voids, but has a much better seal on the bottom of the layer. Howard noted that AASHTO TP- 4 used in the specification was now AASHTO T-312. Some of the Table numbers and page numbers would also need to be corrected. Stephane also noted that he would include a description of the material on the near the top of the specification. James Hulse, noted that Koch has 6 of the BWC applicator paving machines in the Western United States. This item will be included on the agenda for further review and discussion.

- 3. **Core Tests for HMA, PCC and Soils and Aggregates** Troy. It was discussed that the testing labs need some guidelines as to what tests we want them to be AASHTO accredited in to do UDOT work. Troy decided to meet with Howard and Bill to put the list together. The list would cover tests required for completing mix designs and what was required to do project acceptance testing.
- 4. **Presentation of Fatigue and Low Temperature Comparative Test Results between PG 76-28 and Natural Asphalt Mixes.** Stephane Charmot presented some data to the group of a study Koch Pavement Solutions is conducting. The testing was completed in their Wichita Kansas Laboratory and compared PG 76-28 binder with TLA natural asphalt. They compared low temperature cracking properties and fatigue properties of the materials. They are not completed with the report but will give us a copy for distribution to the group when it is done.
- 5. **Flat and Elongates** The question came up again as to where we are on this topic. The Aggregate Central Laboratory is still looking at this and working with the Regions. The Flakiness Index was brought up last meeting. No one from our group had looked into this. The 5 percent Flat and Elongated limit was the question with the industry. It can be met according to our brief study on this as long as impact crushers are used and not jaw crushers. The impact crushers gave numbers in the range of 3 to 4 percent flat and elongated particles.
- 6. Next meeting date. Wednesday, July 16, 2003.

TO :

Dario Alvarez Pioneer Oil Co. Scott Andrus Region 3 Materials

Wade Betenson Atser

Tim Biel Materials Division
Tim Bochnowski Holcim Cement Co.
Lawrence Buss Construction Division
John Butterfield Region 2 Materials
Tom Case Granite Construction Co.
Stephane Charmot Koch Asphalt Co.
Bob Crunk Holcim Cement Co.

Rob Duncan Ash Grove Cement Company

Troy Dunsmore QC Testing

Mike Forrest Staker/Parson Paving Co. Ave Forseth Pioneer Oil Co. Larry Gay Region 4 Materials

Darrell Giannonatti Construction and Materials Divisions

Jim GoldingGeneva Rock Co.Spencer GuthrieBYE Civil EngineeringJerry HallGeneve Rock Co.Craig HaskellRegion 3

Craig Haskell Region
James Hulse Koch
Bruce Hutchinson ICS

Joe Johnson Geneva Rock Co.
Karen Kiggins Heckett MultiServ
Hugh Kirkham Construction Division
Todd Laker Holcim Cement Co.
Bill Lawrence Materials Division
Frank Mayfield Staker/Parson Paving Co.
Fred McGregor Granite Construction Co.

Mitzi McIntyre ACPA

Steven Park Region 2 Materials Cameron Petersen Materials Division Troy Peterson Materials Division Murari Pradhan Materials Division Greg Punske **FHWA** GARCO Testing Mohammad Rahman Tim Rose Region 2 Construction Rodney Terry Region 1 Materials Utah AGC Rich Thorn

Karl Verhaeren Region 4 Construction Glenn Waite Western Rock Products

Douglas Watson CMT

Chris Winkler Trinadad Lake Asphalt
Grant Wiley Region 3 Materials
Brooke Williams Holcim Cement Co.
Mont Wilson Granite Construction Co.

Mike Worischeck Consultant Scott Yates Pioneer Oil Co.

AGENDA Utah Pavement Council Wednesday, July 16, 2003

1:00 PM UDOT Complex Large Conference Room, First Floor 4501 South 2700 West Salt Lake City, UT 84101

1:00 - 1:10	1.	Welcome - Howard Anderson Summary:
1:10 - 1:30	2.	Follow up on Revision of an updated Bonded Wearing Course Specification - Stephane Charmot. Summary:
1:30 - 2:30	3.	Other Items: Summary:
2:30 - 2:45	4.	BREAK
2:45 - 3:15	5.	Other Items: Summary:
3:15 - 3:30	6.	Other Items: Summary:
3:30 - 4:00	7.	Other Items: Next meeting date. Wednesday, August 20th, 2003.